No. 8000120

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

GARDEN BEAN

'Win'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 30th *day of* July *in the year of our Lord one thousand nine hundred and* eighty-one.

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
XP-B107	Win 187 810324	PV NUMBER 8000120
2. KIND NAME: Garden Bean	3. GENUS AND SPECIES NAME: Phaseolus vulgaris	FILING DATE: 5/12/80 TIME: 3:30 A.M. (P.M.)
4. FAMILY NAME (BOTANICAL): Leguminosae	5. DATE OF DETERMINATION: September 1977	FEE RECEIVED: $ 500.00 $ 250.00 DATE: 5/12/80 6/11/81
6. NAME OF APPLICANT(S): Asgrow Seed Company	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*): 9620-190-1 Kalamazoo, MI 49001	8. TELEPHONE AREA CODE AND NUMBER: 616-385-6605

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Delaware	March 22, 1968

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:

Asgrow Seed Company
9620-190-1
Kalamazoo, MI 49001

13. **CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:**

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [ ] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
[ ] YES [ ] NO	[ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [X] YES [ ] NO *(If "Yes," give name of countries and dates.)*

United Kingdom
January 23, 1979

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [✓] YES [ ] NO *(If "Yes," give name of countries and dates.)*

United Kingdom February 23, 1981
187 810407

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

March 18, 1980 — (DATE)

John A. Batcha — (SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

4:30pm
MAY 12 1980

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $500 fee ($250 filing fee and $250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

Asgrow Seed Company
Plant Variety Protection
XP-B107 = win ser #10324
March 18, 1980

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EXHIBIT A: Origin and Breeding History of XP-B107, Garden Bean.

The original cross, Falcon x Eagle, was made in the winter of 1968-1969 and XP-B107 was developed by pedigree (line) selection from that cross. Individual single plant selections were made through the F_6 generation which was grown in 1976. At this point more single vine selections were made and the remainder of the line was bulked and yield and observation trials in 1977. These trials indicated the value of the line and the progeny of one of the single vine selections made in 1976 was bulked for further yield and observation trials in 1978. On the basis of these results, this stock was increased further and was designated XP-B107.

In 1978, 100 single plant selections were harvested separately from a bulk planting. The progenies were grown in separate rows in 1979 as a test of uniformity. Careful examination of these progenies indicated the line was breeding true. The progenies were harvested, bulked and now constitute our breeder's stock seed.

Observations indicate XP-B107 is uniform and stable.

Asgrow Seed Company
Plant Variety Protection
XP-B107 = win 7/7 810324
March 18, 1980

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EXHIBIT B: Novelty Statement Concerning XP-B107 Garden Bean.

XP-B107 is in the "Tendercrop" class of beans. To our knowledge, the commercial variety most similar to XP-B107 is Eagle. Comparative characteristics that make XP-B107 a distinct variety include, but are not necessarily restricted to the following:

1. The pods of XP-B107 are slimmer than those of Eagle at optimum processing maturity. XP-B107 should be harvested at 40 percent five-sieve pods, whereas Eagle is harvested at 55 percent or more five-sieve pods.

2. XP-B107 reaches processing maturity at least four days before Eagle as indicated by data from the 1978 and 1979 Trial Data (optimum harvest underlined).

1978 TRAIL DATA

Date	Sieve Distribution 1,2,3	4	5	Yield (100 lbs/acre)	Sieve Distribution 1,2,3	4	5	Yield (100 lbs/acre)
8/9	22	52	26	133				
8/11	15	47	38	163				
8/12					18	34	48	143
8/14	8	34	58	169				
8/15					14	31	55	158
8/17					7	14	79	154

1979 TRIAL DATA

	XP-B107				Eagle			
Date	Sieve Distribution 1,2,3	4	5	Yield (100 lbs/acre)	Sieve Distribution 1,2,3	4	5	Yield (100 lbs/acre)
8/9	27	40	33	131				
8/11	17	39	44	184	33	40	27	68
8/14	14	33	53	163	29	33	38	104
8/16					26	19	55	110

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3. The genetic seed quality of XP-B107 is significantly better than that of Eagle. Genetic seed quality is an inherent characteristic of a variety and may be measured by a procedure which correlates well with field germination. On a scale of 0-100, in which a rating of 100 is perfect, the following scores were observed for XP-B107 and Eagle:

Replication	XP-B107	Eagle
1	79	50
2	82	32
3	71	49
4	75	40
5	73	43
6	73	44
7	80	54
8	74	41
Ave.	76	44

Eagle

1. The pods of XP-B107 are slimmer than those of Eagle at optimum processing maturity. XP-B107 should be harvested at 40 percent five-sieve pods, whereas Eagle is harvested at 55 percent or more five-sieve pods. (Table 1)

2. Based on percent seed as an index of maturity, XP-B107 reaches processing maturity at least four days before Eagle. (Table 1)

TABLE 1.

Harvest data comparing XP-B107 and Eagle. Data are from a sequence of harvests, and are standardized by percent seed, a recognized measure of maturity in snap beans. Only the optimum harvest is given. This harvest is determined as the last harvest before percent seed begins to limit quality.

Variety	Year	Harvest date	Yield 100 lbs/acre	Percent 5-sieve and over	Percent seed	
					4 sieve	5 sieve
XP-B107	1978	8/11	163	38	8	9
	1979	8/11	184	44	8	9
Eagle	1978	8/15	158	55	7	9
	1979	8/16	110	55	7	11

3. The genetic seed quality of XP-B107 is significantly better than that of Eagle. Genetic seed quality is an inherent characteristic of a variety and may be measured by a procedure which correlates well with field germination. On a scale of 0-100, in which a rating of 100 is perfect, the following scores were observed for XP-B107 and Eagle:

Replication	XP-B107	Eagle
1	79	50
2	82	32
3	71	49
4	75	40
5	73	43
6	73	44
7	80	54
8	74	41
Average	76	44

DMW
3/81

Asgrow Seed Company

Bean 'Win' I

80-120

Transfer of Plant Variety Protection Act Rights

Asgrow Seed Company, a Delaware Corporation with its principle place of business at 2605 E. Kilgore Road, Kalamazoo MI 49001, is the owner of the Plant Variety Protection Act Certificates and applications for certificates listed on and attached as Exhibit A to this document (the "Certificates and Applications").

For good and valuable consideration, reciept of which is hereby acknowledged, Asgrow hereby transfers all of its right, title and interest in and to the Certificates and Applications and to all rights relating thereto under the Plant Variety Protection Act to Seminis Vegetable Seeds, Inc., a California corporation, whose principle place of business is at 1905 Lirio Street, Saticoy, CA 93007-4206.

Dated: January 31, 1997

Asgrow Seed Company

By: Norman A Braksick

Norman A. Braksik
President

FORM APPROVED: OMB NO. 40-R3822

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Bean)

OBJECTIVE DESCRIPTION OF VARIETY
BEAN (Phaseolus vulgaris L.)

NAME OF APPLICANT(S)
Asgrow Seed Company

ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*
9620-190-1
Kalamazoo, MI 49001

FOR OFFICIAL USE ONLY
PVPO NUMBER 8000120

VARIETY NAME OR TEMPORARY DESIGNATION
XP-B107 Win 184 810324

Place numbers in the boxes (e.g. 0 8 9) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____. The location of test area is Twin Falls Idaho. Please answer questions appropriate for your variety if the information is available.

1. TYPE:

[2] 1 = Field *(dry-edible)* 2 = Garden

2. MARKET MATURITY:

[5][3] Days to edible pods [ ][ ] Days to green shells

[ ][ ][ ] Days to dry seeds

[ ][ ][ ][ ] Heat units to edible pods [ ][ ][ ][ ] Heat units to green shells

[ ][ ][ ][ ] Heat units to dry seeds

[0][4] No. days earlier than ..... [8]

..... Same as .. [ ]

[ ][ ] No. days later than ..... [ ]

1 = Tendercrop
2 = Kentucky Wonder
3 = Kinghorn Wax
4 = White Kidney
5 = Michelite 62
6 = Dwarf Horticultural
7 = Bush Blue Lake 290
8 = Other (specify below)
Eagle

3. PLANT:

[ ] 1 = Determinate 2 = Indeterminate

[0][4][4] cm height

[0][3] cm shorter than ..... [8]

Same as .. [ ]

[ ][ ] cm taller than ..... [ ]

comparison variety from above

[5][0] cm spread

[0][0][6] Number primary branches near base

[0][3] cm narrower than ..... [8]

width same as ... [ ]

[ ][ ] cm wider than ..... [ ]

comparison variety from above

[1] Branching habit: 1 = compact 2 = open

[2] Main stalk: 1 = brittle 2 = wirey

[1] 1 = stout 2 = thin

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3. **PLANT: (Cont'd)**

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[2] Pod position: 1 = low 2 = high 3 = scattered

[4] Bush form (illustrated below):

1 = spherical bush form 2 = stem bush form 3 = wide bush form 4 = high bush form

5 = other (specify) _____

4. **LEAVES:**

[2] 1 = smooth 2 = wrinkled

[1] 1 = dull 2 = glossy

[2] Size: 1 = small (Earliwax) 2 = medium 3 = large (Tendercrop)

[2] Color: 1 = light green (as light or lighter than Bountiful) 2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)

5. **FLOWERS:**

[1] Color: 1 = white 2 = cream 3 = pink 4 = lilac 5 = purple 6 = Other (specify) _____

[3][1] Days to 50% bloom

6. **FRESH PODS: (Edible maturity, average for 20 pods)**

[2] Exterior color: 1 = light green (as light or lighter than Bountiful)
2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)
4 = light yellow (Brittlewax)
5 = golden yellow (Cherokee Wax)
6 = green-red variagated (Horticultural)
7 = other (specify) _____

% Sieve size distribution at optimum maturity for non-flat pods

Note:
1 = 4.76 mm to 5.76 mm
2 = 5.76 mm to 7.34 mm
3 = 7.34 mm to 8.34 mm
4 = 8.34 mm to 9.53 mm
5 = 9.53 mm to 10.72 mm
6 = 10.72 mm or larger

1	2	3	4	5	6
		15	45	40	

3 sieve		cm length		mm width		mm thickness
4 sieve	1 4	cm length	0 9	mm width	9 5	mm thickness
5 sieve		cm length		mm width		mm thickness
6 sieve		cm length		mm width		mm thickness

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6. FRESH PODS: (Cont'd)

[3] Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart

[2] Creaseback: 1 = present 2 = absent

[2] Pubescence: 1 = none 2 = sparse 3 = considerable

[2] Spur: 1 = straight 2 = slightly curved 3 = curved

[1] Constrictions: 1 = none 2 = slight 3 = deep

[2] Pod flesh: 1 = light 2 = medium 3 = dark

[0][9] mm spur length

[1] Fiber: 1 = none 2 = sparse 3 = considerable

[6] Number of seeds per pod

[1] Surface: 1 = smooth 2 = rough

[2] Suture string: 1 = present 2 = absent

[1] Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast

[1] Machine harvest: 1 = adapted 2 = not adapted

[1] Pod flavor: (1) Standard (Tendercrop)
(2) Mild Blue Lake (BBL 274)
(3) Strong Blue Lake (Pole FM1)
(4) Mild Romano (Roma)
(5) Strong Romano (Pole Romano)
(6) Other (specify) _____

7. SEED COAT COLOR:

[1] 1 = Monochrome 2 = Polychrome [2] 1 = shiny 2 = dull

[1] Primary color: 1 = white 2 = yellow 3 = buff 4 = tan

[ ] Secondary color: 5 = brown 6 = pink 7 = red 8 = purple
9 = blue 10 = black 11 = other (specify) _____

[ ] Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted

[ ] Secondary color location: 1 = hilar ring 2 = ventral surface
3 = sides 4 = dorsal surface
5 = not restricted to any area 6 = combination of location (specify below)

_____

[ ] Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

8. SEED SHAPE AND SIZE:

[2] Hilum view: 1 = elliptical 2 = oval 3 = round [4] Cross section: 1 = elliptical 2 = oval 3 = cordate 4 = round

[3] Side view:

1 = oval to oblong

2 = round

3 = reniform

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8. SEED SHAPE AND SIZE: (Cont'd)

2 1 = truncate ends 2 = rounded ends

2 9 gm/100 seed

gm/100 seed lighter than

gm/100 seed same as

gm/100 seed heavier than

0 1

8

comparison variety from page one

9. ANTHOCYANIN: (1 = absent 2 = present)

1 Flowers 1 Stems 1 Pods 1 Seeds 1 Leaves

10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant):

1 Anthracnose (specify race below)

0 Rust (specify race below)

0 Powdery mildew

0 Fusarium root rot

0 Pythium root rot

0 Rhizoctonia root rot

0 Pythium wilt

0 Angular leaf spot

0 Bacterial wilt

1 Halo blight (specify race below) Race 2

0 Fuscous blight

0 Red node virus

0 Pod mottle virus

2 Bean common mosaic virus (specify strain below) Common, NY 15

2 Mosaic mottle

1 Black root

0 Bean yellow mosaic virus

1 Curly top IBT 810324

Other (specify below)

11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Aphids

0 Leaf hopper

0 Lygus

0 Pod borer

0 Root knot nematode

0 Seed corn maggot

0 Thrips

0 Weavils

0 Other (specify below)

12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Heat 0 Cold 0 Drought 0 Air pollution

13. COMMENTS:

MAY 12 1980
3:30 pm

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